

REMARKS

Favorable reconsideration of this application, in view of the present amendments and in light of the following discussion, is respectfully requested.

Claims 1 and 16 are pending in this application. Claim 1 is amended, Claims 2-15 are canceled without prejudice or disclaimer, and Claim 16 is added by the present amendment.

Amendments to the claims and added claims find support in the application as originally filed, at least in original claims 10-12, specification at paragraphs [0076] - [0078], and in Figures 22-25. Thus, no new matter is added.

In the outstanding Office Action, Claims 1, 2, 4-10, and 13-15 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Publication No. 2005/0046768 to Wu in view of U.S. Patent 5,115,228 to Harris et al. (hereinafter Harris); Claim 3 was rejected under 35 U.S.C. § 103(a) as unpatentable over Wu and Harris in view of U.S. Patent No. 5,428,366 to Eichenlaub; and Claims 11 and 12 were rejected under 35 U.S.C. § 103(a) as unpatentable over Wu and Harris in view of U.S. Patent No. 6,867,828 to Taira et al. (hereinafter "Taira").

Applicants respectfully traverse the rejection of Claims 1, 2, 4-10, and 13-15 as being unpatentable over Wu and Harris, with regard to amended Claim 1 and added Claim 16.

Amended Claim 1 is directed to a liquid crystal display including, in part, a liquid crystal panel having two screens, first and second front lights, and a pixel driving circuit configured to drive the pixels of a liquid crystal panel to display an image on the liquid crystal panel and alternately display a first and second image on the liquid crystal panel. The first front light lights up while the first image is displayed and the second front light lights up while the second image is displayed. Each of the first and second front lights is configured to light up repeatedly, thereby each of different images is simultaneously displayed on a front surface direction and a back surface direction of the liquid crystal panel.

Furthermore, a light source of the first front light and a light source of the second front light are disposed opposite to each other with respect to a direction along the screens of said liquid crystal panel. In addition, the direction in which light is mainly emitted out of each of the first and second front lights is inclined toward a direction opposite to a direction of the light source of each of the first and second front lights by an angle of 5 to 10 degrees with respect to the direction perpendicular to the liquid crystal panel, respectively.

Added Claim 16 is directed to an information equipment that includes a liquid crystal display with the features of Claim 1.

Applicants respectfully submit that Wu, Harris, and Taira, whether taken individually or in combination, fail to teach or suggest each of the features of Claim 1 or Claim 16.

Applicants realized during attempts to manufacture a double-sided LCD display that, since observers simultaneously view the light from the two front lights, the contrast of the image on one of the two screens of a double-sided LCD display is reduced by the light from the other of the front lights mixing thereinto. Thus, according to the non-limiting embodiment of Applicants' Fig. 22, as discussed in the specification at paragraph [0077], the direction in which light is emitted out of each of the front lights 12 and 13 can be inclined as recited in Claims 1 and 16 to produce a bright, high contrast and vivid screen display image.

As noted in the Office Action at page 8, lines 18-22, Wu and Harris fail to teach that the direction in which the light is emitted out of each of the first and second front lights is inclined toward an upward or downward direction by an angle of 5 to 10 degrees with respect to the direction perpendicular to the liquid crystal panel. Further, Applicants respectfully traverse the assertion in the Office Action that Taira discloses the claimed features.

In a device according to Taira, the angle in which the light is emitted out of the front light can be changed. However, Taira fails to describe or otherwise suggest that the reduction in contrast of each image on the two screens is improved when the light emitted direction of

the two front lights are inclined toward the upward and downward directions opposite to each other.

In addition, Applicants respectfully submit that the cited portion of Taira merely describes a device “with an angle spread less than 10 degrees FWHM,”¹ and Taira does not appear to disclose or otherwise suggest the claimed arrangement of features. Accordingly, Applicants respectfully submit that the combination of Wu, Harris, and Taira fails to teach or suggest “the direction in which light is mainly emitted out of each of the first and second front lights is inclined toward a direction opposite to a direction of the light source of each of the first and second front lights by an angle of 5 to 10 degrees with respect to the direction perpendicular to the liquid crystal panel, respectively,” as recited in Claims 1 and 16.

Therefore, it is respectfully submitted that Claims 1 and 16 each patentably define over Wu, Harris, and Taira, whether taken individually or in combination.

Accordingly, it is respectfully requested the rejection of Claims 1, 2, 4-10, and 13-15 be withdrawn.

Further, the rejections of Claims 3, 11, and 12 under 35 U.S.C. § 103(a) as unpatentable over Wu, Harris, and Eichenlaub or Taira are rendered moot by the cancellation, without prejudice or disclaimer, of Claims 3, 11, and 12.


Therefore, Applicants respectfully submit that Claims 1 and 16 are allowable.

¹ Taira at column 2, lines 12-13.

Consequently, in light of the above discussion and in view of the present amendment, this application is believed to be in condition for allowance and an early and favorable action to that effect is respectfully requested.

Respectfully submitted,

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